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November 2, 1992

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Donna Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Re: ET Docket No. 92-191 Amendment of Section 2.106 of the Commission's Rules to Upgrade to Primary Status the Secondary Mobile-Satellite Service Allocation at 19.7-20.2 GHz and 29.5-30.0 GHz

Dear Ms. Searcy:

Enclosed are the original and required copies of the comments of Norris Satellite Communications, Inc., in the above-captioned proceeding.

If there are any questions, please contact the undersigned.

Sincerely yours,

Leslie A. Taylor

Attachments

cc: Carl Huie, Office of Engineering and Technology
Room 7102-B, 2025 M Street, N.W.

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

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In the Matter of

Amendment of Section 2.106 of the
Commission's Rules to Upgrade to
Primary Status the Secondary
Mobile-Satellite Service Allocation
at 19.7-20.2 GHz and 29.5-30.0 GHz

ET Docket No. 92-191
RM - 7511

COMMENTS OF NORRIS SATELLITE COMMUNICATIONS, INC.

Norris Satellite Communications, Inc., "Norris," by its attorney, hereby respectfully submits its comments in support of the Commission's proposal to upgrade portions of the mobile-satellite service allocations in the 19.7-20.2 GHz and 29.5-30.0 GHz bands to co-primary.

I. Introduction and Background

Norris holds a license to construct two satellites and launch and operate one satellite providing domestic-fixed satellite service.¹ Along with its application for a license, Norris also filed a Petition for Rulemaking, RM-7511, requesting that the Commission create a new General-Satellite Service, in the 19.7-20.2 GHz and 29.5-30.0 GHz band, in which fixed, mobile and broadcasting satellite service could be provided in the same spectrum from the same satellite facility. The Commission placed this rulemaking petition on public notice and comments, mostly favorable, were received.

¹ See, Order and Authorization, FCC 92-268, File Nos. 54-DSS-P/L-90 and 55-DSS-P-90, released July 7, 1992, issued to Norris Satellite Communications, Inc., petition for reconsideration pending.

Although, at Norris's request² the Commission, in June, acted only on its application to provide domestic-fixed satellite service, the request to provide General Satellite Service is still pending before the Commission. Norris asked the Commission to proceed with action on the domestic-fixed satellite service portion of its license application pending the outcome of the rulemaking proceeding on the General Satellite Service.

Consequently, Norris has a clear stake in the outcome of the instant rules proposed by the Commission.

Norris originally proposed that the Commission create a General-Satellite Service in which fixed-satellite, broadcasting satellite and mobile satellite service could be provided from the same communications facility in the same spectrum. The Commission, however, in developing its proposals for the 1992 World Administrative Radio Conference (WARC-92), recommended that the United States seek an allocation for a General-Satellite Service that would be defined as "a radio communication service using satellites for fixed and mobile applications."³

WARC-92 did not not adopt this proposal but rather, agreed to upgrade the secondary MSS allocation at 20/30 GHz in Region 2 to primary status shared with FSS.⁴ In addition, the Conference upgraded the secondary MSS allocation in the 20.1-20.2 GHz and 29.9-30.0 GHz bands to co-primary with FSS in Regions 1 and 3.⁵

² See, Letter of Norris Satellite Communications, Inc., to the Federal Communications Commission, dated October 19, 1991.

³ See, Report, General Docket No. 89-554, 6 FCC Rcd 3900 at paragraph 88 (1991).

⁴ See, Final Acts of the World Administrative Radio Conference, Malaga-Torremolinos, 1992 (Final Acts).

⁵ See, Final Acts, supra.

The Commission, in the instant rulemaking, proposes to adopt, in the U.S. Table of Allocations, the actions of WARC-92.

II. The Commission Should Adopt the Rule Revisions as Proposed

Although the Commission, following the lead of WARC-92, and noting the absence of a Broadcasting-satellite service allocation in the subject bands, does not propose creation of a General-Satellite Service identical to that originally proposed by Norris, Norris nevertheless supports adoption of the proposed allocations.

The Commission and the United States at WARC-92, showed substantial leadership, in seeking the upgrade of the Mobile-Satellite Service in the 20/30 GHz band. NASA, which has been supportive of the concept of the General-Satellite Service since proposed by Norris, worked tirelessly at WARC-92 to achieve this important and forward-looking objective.

Amending the U.S. Table of Allocations as proposed is an important step in promoting the use of a currently-unused (in the United States) frequency band, permitting satellite operators such as Norris to implement innovative and multi-use systems, and promoting flexibility for users of satellite communications.

III. Upgrade of the Mobile-Satellite Service at 20/30 GHz Will Have Important Consumer Benefits

As Norris stated in its original Petition for Rulemaking and Comments in support of the rulemaking petition, aggregating services on the same spacecraft can promote spectrum efficiency, reduce transaction costs, including investment in multiple earth stations and achieve economies of scale and scope.

Up to now, only Japan and Europe have brought Ka-band technology out of laboratory and into the marketplace. NASA, with its Advanced Communication Technology Satellite (ACTS), will commence its experiments in the 20/30 GHz band upon deployment of that satellite in the Spring of 1993. The ACTS experimenters have planned numerous experiments, some of which could be considered "fixed-satellite" and some of which could be considered "mobile-satellite."⁶ Adoption of the WARC-92 allocations will provide a boost to these experiments in that the opportunity to implement commercial systems offering both types of service would be permissible from the allocations perspective.

As for commercial systems, such as Norris', more flexibility in the allocations to be used will enable the company "to be more responsive to the actual demands of the services as they develop."⁷ The company's current marketing is focusing on fixed-satellite services, consistent with its license. However, the ACTS user community has expressed great interest in the Norris capacity, and Norris wants want to be able to accommodate both the mobile-satellite service users as well as the fixed-satellite service users, to the extent possible.

In order for Norris to have this flexibility and opportunity for consideration of the pending portion of its application, it is imperative that the Commission proceed expeditiously with the instant proceeding.

⁶ Some ACTS experiments would be considered broadcasting-satellite.

⁷ See, Amendment of Parts 2, 22, and 25 of the Commission's Rules to Allocate Spectrum for, and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Mobile Satellite Service for the Provision of Various Common Carrier Services, GEN Docket No. 84-1234, Memorandum Opinion and Order, 2 FCC Rcd. 6016, 6018 (1989) (MSS Generic Allocation Order).

IV. Upgrade of Mobile-Satellite Service Is Consistent with Policy Direction in Use of the Electromagnetic Spectrum

The Commission, and the United States, have moved towards a more generic approach to spectrum use over the past few years. In particular, the United States adopted a generic approach with regard to mobile satellite services in preparing for the 1987 Mobile WARC.⁸ While the U.S. did not achieve total success on this issue at the 1987 conference, it has continued to work towards this goal at every opportunity.

At WARC-92, the resistance to the concept of generic allocations had diminished, and new frequency bands allocated for mobile-satellite service (1525-1530 MHz, 1610-1626.5 MHz, 2483.5-2500 MHz, 1980-2010 MHz, 2170-2200 MHz, 2500-2520 MHz and 2670-2690 MHz, with additional allocations in Region 2 at 1970-1980 MHz and 2160-2170 MHz) were all allocated to a generic Mobile-Satellite Service. As stated at page 23 of the United States Delegation Report on WARC-92, "On balance, the world-wide acceptance of MSS allocations, rather than service-specific mobile-satellite allocations, has been significantly advanced by the decisions of WARC-92." The tacit understanding at the Conference was that all future MSS allocations would be generic.

As the Commission is aware, with a virtually unused frequency band such as 20/30 GHz, an environment of flexibility in which equipment and services can be created which utilizes technological advances allowing more extensive sharing of frequencies among users, and among services. Such advances are being applied in

⁸ See, Preparation for an International Telecommunication Union World Administrative Radio Conference for the Mobile Services, GEN Docket No. 84-607, Report and Order, 2 FCC Rcd. 821 (1987).

services such as cellular radio.⁹ In other terrestrial services, the Commission also has encouraged the use of technological innovations to alleviate the growing problem of congestion and competing demand for radio spectrum.¹⁰

This current Commission proposal provides an important opportunity to promote commercial implementation of flexible communications systems operating in new frequency bands. Such implementation is key to retaining this nation's technological and marketplace leadership in satellite communications.

V. The Commission Should Defer Adoption of Technical Rules with Regard to Provision of Multiple Services in the 20/30 GHz Band

In its Notice, the Commission requests comments on technical standards for operation of multiple services in the 20/30 GHz band. The Commission also notes that NASA, in its comments on RM-7511, suggested a possible partition of the 20/30 GHz band, with technical standards appropriate to the types of services to be provided.

Norris believes that it is premature for the Commission to adopt technical standards at this time. Much information will be gained during the ACTS experiments. This information should be very useful in developing the technical parameters needed to ensure compatible and efficient operation of fixed and mobile

⁹ See, "New Cellular Technology at U S West," New York Times, October 1, 1992, which announces U S West's plans to utilize the Qualcomm-developed code division multiple access (CDMA) technology to greatly multiple the capacity of its cellular system.

¹⁰ See, e.g., Trunking in the Land Mobile Radio Services for Effective and Efficient Use of the Spectrum, PR Docket No. 87-213, Report and Order, 5 FCC Rcd. 4016 (1990); Amendment of Parts 2 and 15 of the Rules with regard to the operation of spread spectrum systems, GEN Docket No. 89-354, Report and Order, 5 FCC Rcd. 4123 (1990).

satellite services in the 20/30 GHz band. In addition, Norris believes that it is premature to consider partition of the band. Such partition could be a back door to re-introducing band segmentation that may not be needed, depending on the outcome of the ACTS experiments and further evolution of technology.

In short, Norris urges the Commission at this time, to adopt the revisions to the U.S. Table of Allocations, as proposed, and to defer consideration of technical amendments to a future date.

VI. Conclusion

Norris supports the Commission's proposal to incorporate the results of WARC-92, regarding the 20/30 GHz band, into the U.S. Table of Allocations, and urges that such action be taken at the earliest possible date.

Respectfully submitted,

Norris Satellite Communications, Inc.

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Date: November 2, 1992